

Hybrid Vee Hull / Wing in Ground Effect Vessel

This patent claims benefit of the provisional patent 60/416,708 filed on 10/07/2002 filed by Roger G. D. Guerard.

Background – Field of Invention

This invention relates to hybrid vee-hull planning boats incorporating wing-in-ground effect chines, sponsons, or external appendages.

Background – Description of Prior Art

Conventional vee-hull planning boats are designed to cut through waves without pounding or slamming but sacrifice speed and transverse stability for comfort. The fineness of the forward vee-section of the hull determines the smoothness of the ride. A narrow vee-section sinks deeper into the water to support the same amount of weight as a wider flatter vee-section. Narrow vee-hulls inherently have increased wetted surface, which ultimately results in increased drag in the water. To balance this effect conventional vee-hulls have a narrow vee-section forward transitioning into a wide flat vee-section aft. Flattening the vee-shape makes conventional vee-hulls more transversely stable and increases attainable high-end speed of the vessel. A narrow forward section helps soften the impact of waves providing a smoother ride when compared to vessels with fuller or blunt forward hull sections.

Conventional planning vee-hulls may have chines. The motion of conventional vee-hulls tends to be transversely tender when planing, as previously stated. A person walking from one side of the boat to the other side causes the vessel to lean from side to side as well. To remedy this the